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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,469	02/06/2002	Steven R. Lange	KLA1P027X1	2656

22434 7590 05/09/2003

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EXAMINER
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BEN, LOHA

ART UNIT	PAPER NUMBER
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2873

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/072,469

Applicant(s)

LANGE

Examiner

LOHA BEN

Art Unit

2873



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Feb 6, 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-24 is/are allowed.
- 6) ☒ Claim(s) 1, 15, 16, 25-28, and 33 is/are rejected.
- 7) ☒ Claim(s) 2-14, 17-19, 29-32, and 34-37 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 6) ☐ Other:

Loha Ben  
Primary Examiner

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 15, 16, 28 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Koshishiba et al.

As regards claim 1, Koshishiba et al teaches a microscope inspection apparatus having an objective lens, 3; a field of view defined by convergent lens, 2, the objective lens, 3, and a deflection coil, 4; and a plurality of detectors arranged in a matrix form ( more than one detector array) positioned substantially in the field of view.

As regards claim 15, Fig. 7 of Koshishiba et al and the accompanying text would clearly signify that the objective lens, 3, is made of refractive material.

As regards claim 16, Figs. 8A, 8B, 17 and 19, and the accompanying texts teach the alignment of the field of view with the two axis coordinate system wherein the first and second axes are orthogonal to each other and the first axis is parallel to the scanning direction of the inspection apparatus, wherein at least one detector array lies within each and every position along the second axis regardless of the detector array's position along the first axis.

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As regards claim 28, the recitation is similar to that of claim 1, except that the inspection is to be done on a semiconductor wafer, not just on a specimen in general. The teaching on the semiconductor wafer can be found in column 1, lines 7-12.

As for method claim 33, the process carries an inherent characteristic of apparatus claim 28. See also the mounting of the object to be tested (which can be a semiconductor wafer) on the chuck, 25, illustrated in Fig. 8A of Koshishiba et al.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 25-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 25 recites the limitation "the zoom lens" in line 4 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claims 26 and 27, depending from claim 25, inherit the indefiniteness thereof.

***Allowable Subject Matter***

Claims 20-24 are allowed.

Claim 25 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

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Claims 26 and 27 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 2-14, 17-19, 29-32 and 34-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The allowability of claims 20-24 is based on the fact that Koshishiba et al's inspection apparatus does not teach the split point and the zoom lens of claim 20; and the objective lens of Koshishiba et al is not a **catadioptric objective lens** ( which includes a combination of reflective and refractive lens surfaces ).

*Communication*

Any inquiry concerning this communication should be directed to Loha Ben at telephone number (703)308-4820.

The examiner's work schedule is from Monday to Saturday, and generally between 12:00 noon and 8:00 p.m.

A receptionist can be reached at (703) 308-0956 concerning matter of a general nature.

May 4, 2003



**Loha Ben**  
**Primary Examiner**